



RECEIVED  
OCT 18 2004

2637  
41

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Cheong et al.	Examiner:	Corriellus, J.
Serial No.:	09/519,727	Group Art Unit:	2637
Filed:	March 3, 2000	Docket No.:	STFD.057PA (S99-025)
Title:	Iterative Multi-User Detection		

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence and the papers, as described hereinabove, are being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on October 8, 2004.

By:

*Erin M. Nichols*  
Erin M. Nichols

OFFICE ACTION RESPONSE AND AMENDMENT

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the non-final Office Action dated August 4, 2004, please consider the following amendment and remarks.

Amendments to the claims are reflected in the listing of claims beginning at page 2 and the Remarks begin on page 9.

Please charge Deposit Account No. 50-0996 (STFD.057PA) in the amount of \$160.00 for the eight additional claims, including two new independent claims, for a small entity. Also, please charge/credit the same deposit account for any additional fees/overages.

10/12/2004 PAT. MAIL 20000101 001000

10/12/2004 10/12/2004  
10/12/2004 10/12/2004

are allowable over the cited art because the subject matter (involving, e.g., calculation of the data signal) set forth by these newly presented claims is not taught by the cited art.

In view of the above discussion, Applicant believes that the rejection has been overcome and the application is in condition for allowance. A favorable response is requested. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is encouraged to contact the undersigned at (651) 686-6633.

Respectfully submitted,

CRAWFORD MAUNU PLLC  
1270 Northland Drive, Suite 390  
St. Paul, MN 55120  
651/686-6633

Dated: October 8, 2004

By: 

Robert J. Crawford  
Reg. No. 32,122

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875						Application or Docket Number <span style="font-size: 1.5em;">09/519727</span>	
<b>CLAIMS AS FILED - PART I</b> (Column 1) (Column 2)							
FOR	NUMBER FILED	NUMBER EXTRA			SMALL ENTITY	OR	OTHER THAN SMALL ENTITY
BASIC FEE (37 CFR 1.16(a))					RATE		RATE
TOTAL CLAIMS (37 CFR 1.16(c))	23	minus 20 =	3		FEE		FEE
INDEPENDENT CLAIMS (37 CFR 1.16(b))	3	minus 3 =			\$		\$
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(d))							
* If the difference in column 1 is less than zero, enter "0" in column 2.							
				TOTAL		TOTAL	
<b>CLAIMS AS AMENDED - PART II</b> (Column 1) (Column 2) (Column 3)							
AMENDMENT A	Total (37 CFR 1.16(c))	CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		
	Independent (37 CFR 1.16(b))					RATE	ADDITIONAL FEE
	Total (37 CFR 1.16(c))	24	Minus	23	=	9	9
	Independent (37 CFR 1.16(b))	3	Minus	3	=	X \$	X \$
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d))					+	+
					TOTAL ADD'L FEE		TOTAL ADD'L FEE
AMENDMENT B	Total (37 CFR 1.16(c))	CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		
	Independent (37 CFR 1.16(b))					RATE	ADDITIONAL FEE
	Total (37 CFR 1.16(c))	24	Minus	24	=	X \$	X \$
	Independent (37 CFR 1.16(b))	8	Minus	3	=	X \$	X \$
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d))					+	+
					TOTAL ADD'L FEE		TOTAL ADD'L FEE
AMENDMENT C	Total (37 CFR 1.16(c))	CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		
	Independent (37 CFR 1.16(b))					RATE	ADDITIONAL FEE
	Total (37 CFR 1.16(c))	24	Minus	24	=	X \$	X \$
	Independent (37 CFR 1.16(b))	8	Minus	8	=	X \$	X \$
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d))					+	+
					TOTAL ADD'L FEE		TOTAL ADD'L FEE

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

\*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**PATENT APPLICATION FEE DETERMINATION RECORD**

Substitute for Form PTO-875

Application or Docket Number

09/519727

**CLAIMS AS FILED - PART I**

(Column 1)

(Column 2)

SMALL ENTITY

OR

OTHER THAN  
SMALL ENTITY

FOR	NUMBER FILED	NUMBER EXTRA
BASIC FEE (37 CFR 1.16(a))		
TOTAL CLAIMS (37 CFR 1.16(c))	minus 20 =	*
INDEPENDENT CLAIMS (37 CFR 1.16(b))	minus 3 =	*
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(d))		

RATE	FEE
	\$ _____
X \$ _____ =	
X \$ _____ =	
+ \$ _____ =	
TOTAL	

RATE	FEE
	\$ _____
X \$ _____ =	
X \$ _____ =	
+ \$ _____ =	
TOTAL	

\* If the difference in column 1 is less than zero, enter "0" in column 2.

**CLAIMS AS AMENDED - PART II**

10-12-04

(Column 1)

(Column 2)

(Column 3)

SMALL ENTITY

OR

OTHER THAN  
SMALL ENTITY

AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total (37 CFR 1.16(c))	32	Minus	24	= 8
	Independent (37 CFR 1.16(b))	10	Minus	8	= 2
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d))				

RATE	ADDI- TIONAL FEE
X \$ 9 =	72
X \$ 14 =	88
+ \$ _____ =	
TOTAL ADD'L FEE	

RATE	ADDI- TIONAL FEE
X \$ _____ =	
X \$ _____ =	
+ \$ _____ =	
TOTAL ADD'L FEE	

AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total (37 CFR 1.16(c))	*	Minus	**	=
	Independent (37 CFR 1.16(b))	*	Minus	***	=
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d))				

RATE	ADDI- TIONAL FEE
X \$ _____ =	
X \$ _____ =	
+ \$ _____ =	
TOTAL ADD'L FEE	

RATE	ADDI- TIONAL FEE
X \$ _____ =	
X \$ _____ =	
+ \$ _____ =	
TOTAL ADD'L FEE	

AMENDMENT C		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total (37 CFR 1.16(c))	*	Minus	**	=
	Independent (37 CFR 1.16(b))	*	Minus	***	=
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d))				

RATE	ADDI- TIONAL FEE
X \$ _____ =	
X \$ _____ =	
+ \$ _____ =	
TOTAL ADD'L FEE	

RATE	ADDI- TIONAL FEE
X \$ _____ =	
X \$ _____ =	
+ \$ _____ =	
TOTAL ADD'L FEE	

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

\*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.